



REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF255.0M-29D	255.0 MHz IF SAW Filter 29.59 MHz Bandwidth

Specification Contents

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- o Test Circuit
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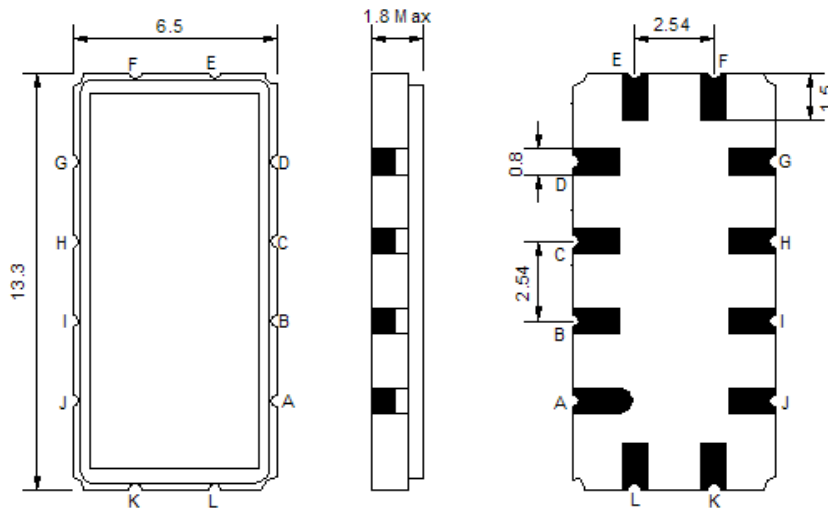
Notes

- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



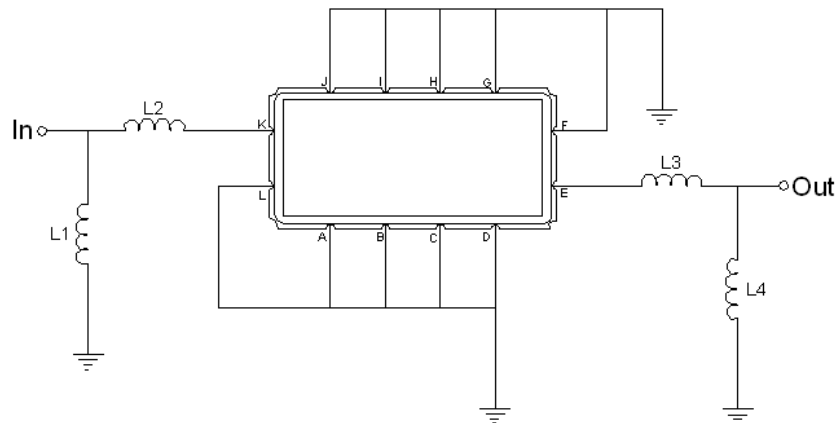


Mechanical Dimensions (mm)



Pin Description	
A, B, C, D, F, G, H, I, J, L	Ground
K	Input
E	Output

Test Circuit



Test Fixture & Values	
Input	L1 = 5.6 nH, L2 = 2.2 nH
Output	L3 = 2.2 nH, L4 = 5.6 nH
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	-	70
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-

Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).

Those impedances could be modified with different impedance values and/or structures, if necessary.

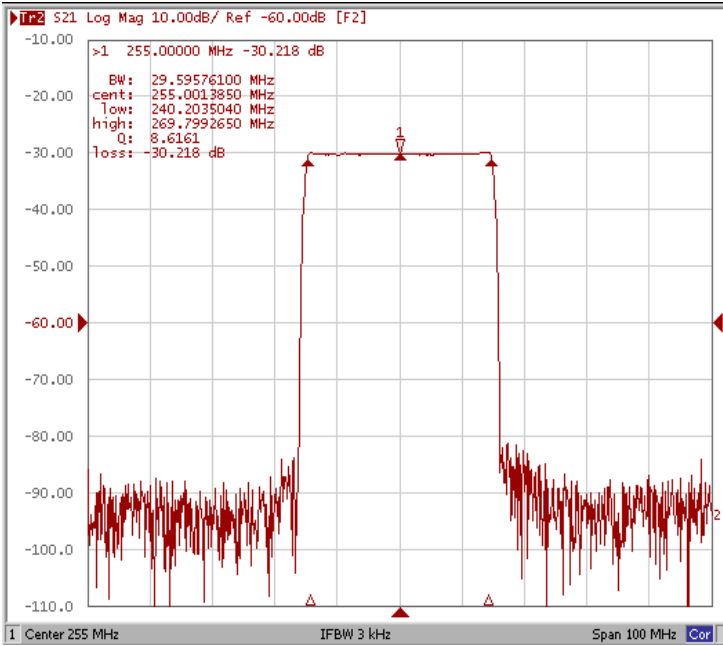
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	255.0	-
Insertion Loss at Fo	dB	-	30.2	33.0
Group Delay Variation at Fo ± 14.32 MHz	nsec	-	32	70
Absolute Delay at Fo	usec	-	2.08	-
Passband Ripple Variation at Fo ± 14.32 MHz	dB	-	0.6	1.1
Bandwidth at -1dB	MHz	29.05	29.59	-
Bandwidth at -3dB	MHz	-	30.04	-
Bandwidth at -40dB	MHz	-	31.96	32.05
Ultimate Rejection	dB	47	52	-
Temperature Coefficient	ppm/°C	-	-72	-

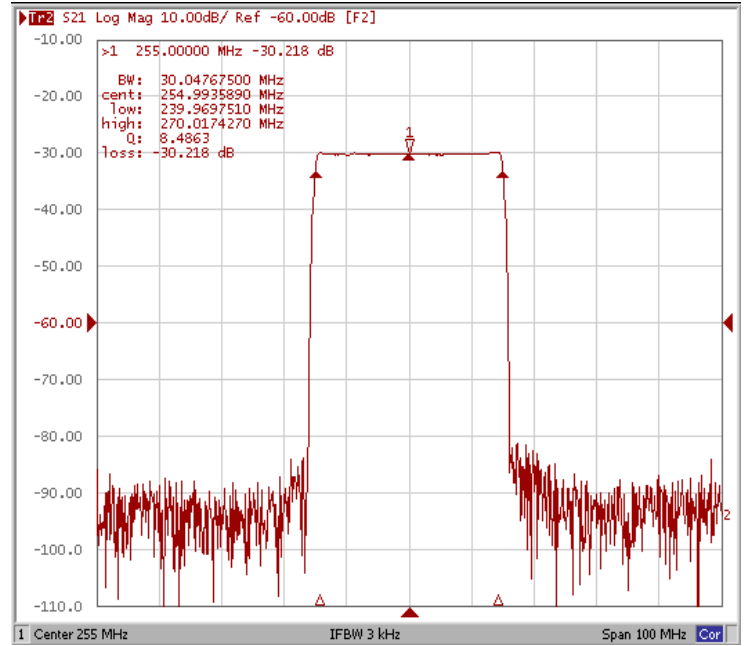


Frequency Response

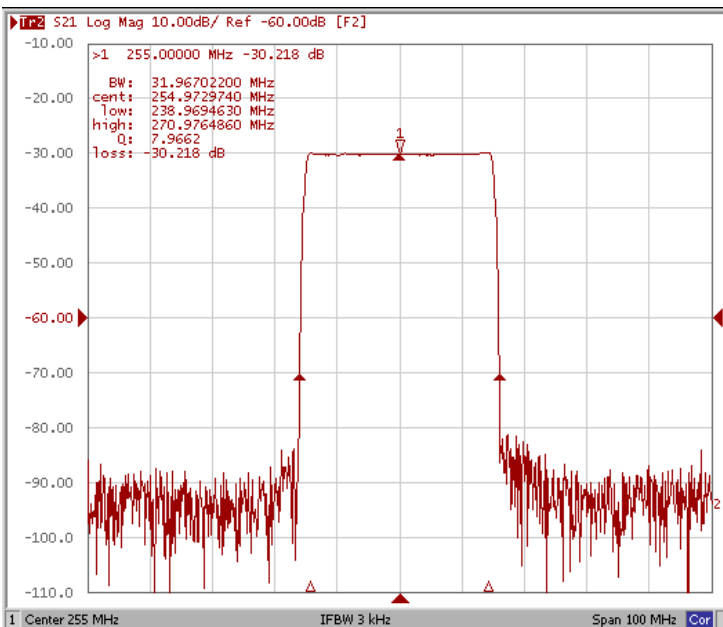
Bandwidth at -1.0 dB



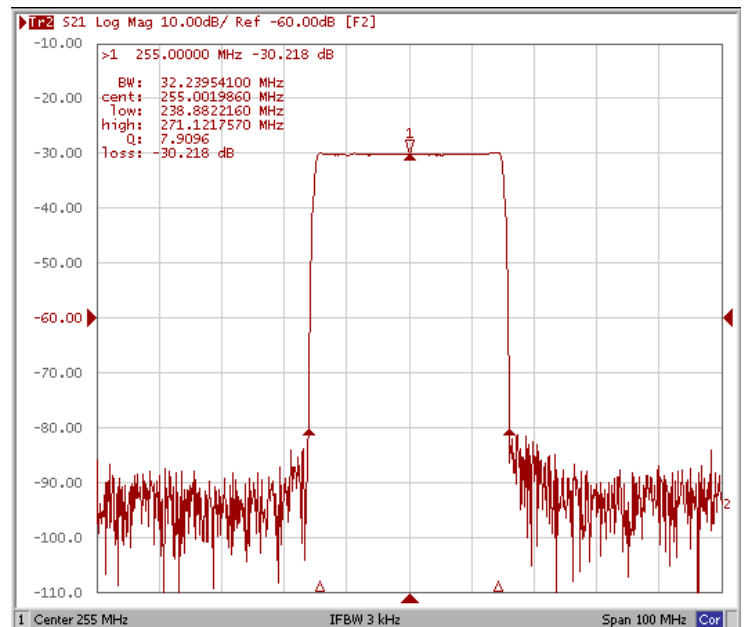
Bandwidth at -3.0 dB



Bandwidth at -40 dB

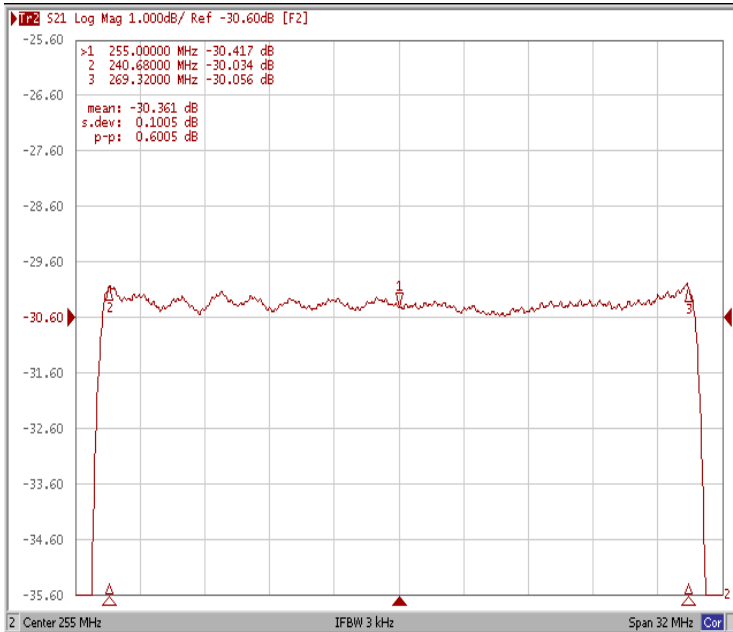


Bandwidth at -50 dB

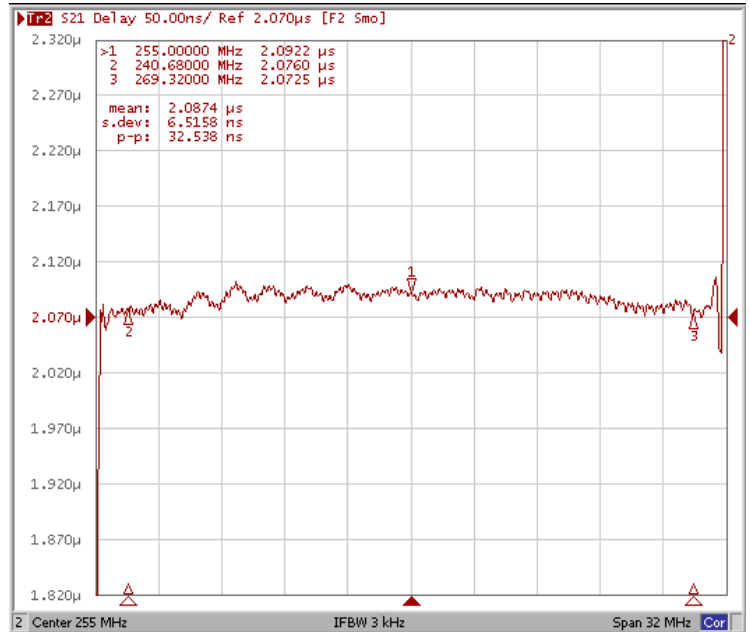




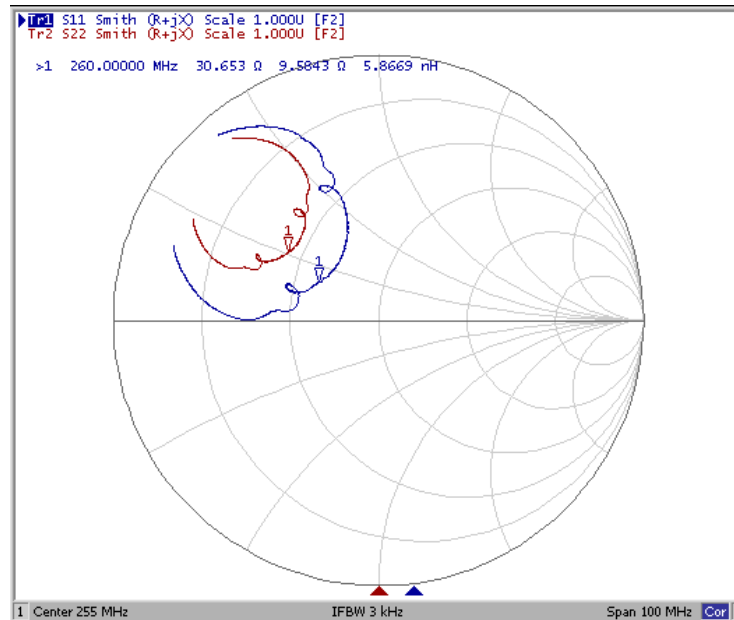
Ripple Variation $F_o \pm 14.32$ MHz



Group Delay Variation $F_o \pm 14.32$ MHz



Smith Chart





VSWR

